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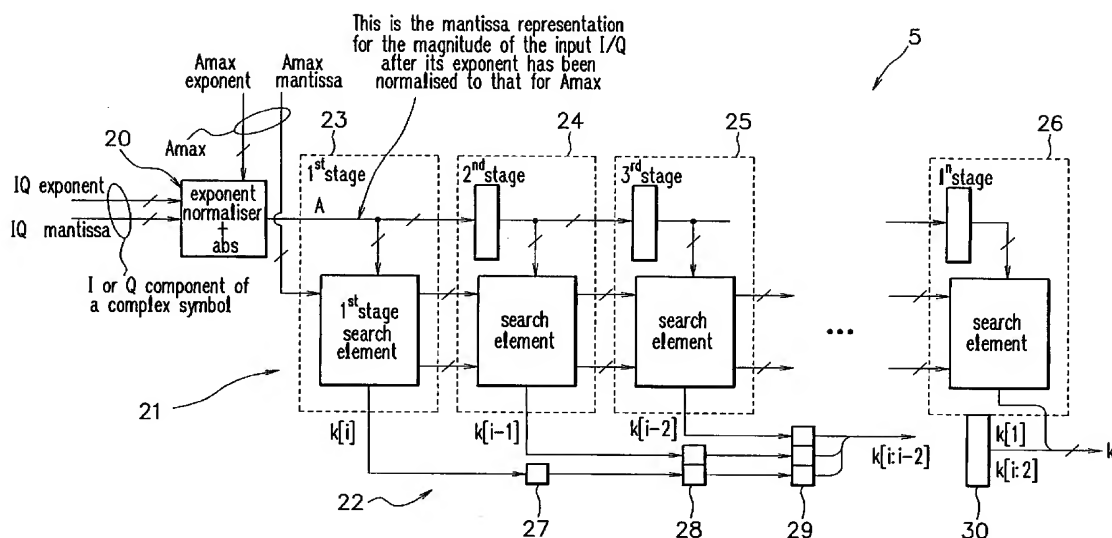
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(54) Title: DEMODULATION OF A MULTI-LEVEL QUADRATURE AMPLITUDE MODULATION SIGNAL



(57) Abstract: A device (5) for determining k representative of the magnitude A of an orthogonal component of a Quadrature Amplitude Modulation (QAM) symbol, including: multi-stage binary search circuitry (21) for conducting a multi-stage binary search for the value of A between predetermined maximum and minimum values Amax and Amin, each stage producing a single bit binary output; and integer value construction circuitry (22) for constructing the integer value k by juxtaposing the binary outputs from consecutive stages of the binary search, where $W = (A_{\max} - A_{\min}) / n$, n equals 2^i and i is an integer, Amax is a maximum detectable level of the magnitude A, Amin is a minimum detectable level of the magnitude A, and W is the incremental level between consecutive values of the integer value k.



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